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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,940	04/02/2004	Hiroshi Terazawa	TERA3002/FJD	8949

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ALEXANDRIA, VA 22314

EXAMINER
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PATEL, VISHAL A

ART UNIT	PAPER NUMBER
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3673

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/815,940	<b>Applicant(s)</b> TERAZAWA, HIROSHI	
	<b>Examiner</b> Vishal Patel	<b>Art Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claim 8 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 8 is directed to a different species than the one elected by the applicant, applicant has not claimed a labyrinth portion with an L-shaped section in any of the claims 1-4 originally filed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 8 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsue et al (US. 4,516,783).

The reference of Mitsue clearly discloses every feature claimed by applicant, see figure 5), a first annular case (30) having a cylindrical portion (cylindrical portion on surface 54) and a first vertical wall (32b), a second annular case (40) having a cylindrical portion (portion on 102) and a second vertical wall (42b), an annular seal member on the second annular case having an axial lip (lip that contacts surface 32b) on the second case that contact the first case vertical wall

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(32b) and a radial lip (lip 48) that directly contact one of a stationary or rotary members of a bearing unit (surface 54 is either a stationary or rotary member surface, figure 5) and a bearing unit (bearing unit similar shown in figure 2) having stationary and rotary members (104 and 102). There is a gap between the end of 32c and end of the fitting cylindrical portion of the second annular cast that is on 102. The radial lip inclining further away from the first vertical wall than its leg portion (the radial lip 48 is inclined further away from the first vertical wall than its leg portion).

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method limitations and is given little patentable weight). Furthermore the annular cases of Mitsue are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

4. Claims 5-7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohtsuki et al (US. 6,637,754).

Ohtsuki discloses a bearing unit (figure 28-29) having a stationary member and a rotary member (rings 1 and 2), a seal having a first annular case (11), a second annular case (12), both cases having a fitting cylindrical portion and a vertical wall extending therefrom, an annular seal member on the second case (seal formed by two axial lips 16a and 16b2, where lip 16a contacts the vertical wall), the seal is disposed in the bearing unit, the first annular case is on either the stationary or rotary members and the second annular case is on either the other of the stationary

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or rotary members and the seal having a second axial lip (lip 16b2). A radial lip (16b1) inclining further away from the first vertical wall than its leg portion (the radial lip 16b1 is inclined further away from the first vertical wall than its leg portion).

For courtesy the limitations of claim is disclosed by Ohtsuki (figure 28). A gap exist between the stationary member or rotary member, an end of the fitting cylindrical portion of the second annular case and an end of the vertical wall of the first fitting member (L-shape gap near the numeral 17), the gap constitutes a labyrinth portion with an L-shape section.

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method limitations and is given little patentable weight). Furthermore the annular cases of Ohtsuki are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

5. Claims 5-7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by AAPA (figure 5 or 6).

AAPA figures 5 and 6 disclose all the limitations of the claims 5-7 and further that the annular cases are mounted on respective stationary and rotary members of a bearing unit.

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method

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limitations and is given little patentable weight). Furthermore the annular cases of AAPA are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Mitsue.

AAPA discloses the invention substantially as claimed above but fails to disclose that the radial lip directly sealingly engages the outer circumferential wall of the stationary member or the rotatable member. Mitsue discloses to have seal where a radial lip (lip 48) directly contacts one of a stationary member and a rotatable member (figure 5) or as shown in figure 6, a radial lip (48) contacts an annular case member instead of the stationary member or the rotatable member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the seal of AAPA to have the annular case to have a shorter fitting cylindrical portion so that the radial lip directly contacts one of the rotatable and stationary members as taught by Mitsue, since having a radial lip contact an annular case or directly contact one of the stationary and rotatable members is considered to be art equivalent.

***Response to Arguments***

8. Applicant's arguments filed 11/15/06 have been fully considered but they are not persuasive.

Applicants' argument that there is no basis for the restriction is not persuasive in view of paragraph 1 in Office Action Mailed on 11/28/06.

Applicants' argument that examiner has not provided a basis for 102 is not persuasive in view of the rejection above. Either Mitsue or Ohtuski teach all the limitations of claims 5 and 9.

Applicants' argument that the rejection based on AAPA and the rejection based on AAPA and Mitsue is not proper because the parts of the structure of figures 5-6 are not first assembled outside the bearing members. This particular argument is not persuasive because as stated in the rejection the structural limitations are disclosed by AAPA and AAPA in view of Mitsue. Furthermore the limitation "first assembled outside the bearings members" would be considered to be method limitations and given little patentable weight.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP  
March 13, 2007

A handwritten signature in black ink, appearing to read 'Vishal Patel', with a stylized flourish at the end.

Vishal Patel  
Patent Examiner  
Tech. Center 3600